

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of synchronizing the delivery of (a) first information which is to be presented to a user via first output means of a multi-modal interface (b) second information which is to be presented to the user via second output means of the multi-modal interface, the method comprising:

i) estimating total time needed to deliver the first information (a) to the first output means or (b) to a store local to the first output means;

ii) estimating total time needed to deliver the second information (a) to the second output means or (b) to a store local to the second output means; and

iii) using the estimates obtained in step i) or step ii) to determine whether presentation to the user of the first or second information needs to be delayed to achieve a desired synchronism of presentation; and

iv) applying any delay determined in step iii) to achieved the desired synchronism of presentation.

2. (Original) A method as claimed in claim 1, wherein the first and second output means are provided by a single output device.

3. (Previously Presented) A method as claimed in claim 1, wherein at least one of the first and second output means is a visual display means.

4. (Previously Presented) A method as claimed in claim 1, wherein at least one of the first and second output means is an audio reproduction means.

5. (Previously Presented) A method as claimed in claim 1, wherein at least one of the first and second output means is a tactile reproduction means.

6. (Previously Presented) A method as claimed in claim 1, wherein the first means is a visual display means and the second means is an audio reproduction means.

7. (Previously Presented) A method of synchronizing delivery of (a) first information which is to be presented to the user via a visual display of a multi-modal interface and (b) second information which is to be presented to the user over a visual or an audio interface of the multi-modal interface, the method comprising:

i) estimating total time needed to deliver the first information (a) to the visual display or (b) to a store local to the visual display;

ii) estimating total time needed to deliver the second information (a) to the visual or audio interface or (b) to a store local to the visual or audio interface; and

iii) using the estimates obtained in step i) or step ii) to determine whether presentation of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation; and

vi) applying delay determined in step iii) to achieved the desired synchronism of presentation.

8. (Previously Presented) A method of synchronizing the delivery(a) of first information which is to be presented to the user via a visual display of a multi-modal interface and (b) of second information which is to be presented to the user over an audio interface of the multi- modal interface, the method comprising:

i) estimating total time needed to deliver the first information (a) to the visual display or (b) to a store local to the visual display;

ii) estimating total time needed to deliver the second information (a) to the audio interface (b) or to a store local to the audio interface; and

iii) if the total time estimated in step i) is more than that estimated in step ii) delaying presentation of the second information to the user sufficiently to enable the first information to be presented to the user before the second information is presented to the user.

9. (Previously Presented) A method as claimed in claim 7, wherein the delivery of the first information in step (i) is controlled by a server process, delivery of the first information involving delivery of that information to a client of the server process.

10. (Previously Presented) A method as claimed in claim 7, wherein delivery of the second information in step (ii) is controlled by a server process, delivery of the second information involving delivery of that information to a client of the server process.

11. (Previously Presented) A method as claimed in claim 7, wherein latency of a communication channel over which the first information will be delivered to a visual display or the store is measured, the measurement of latency being used in the estimation of total time carried out in step (i).

12. (Previously Presented) A method as claimed in claim 7, wherein latency of a communications channel over which the second information will be delivered to the audio interface or to the store local to the audio interface is measured, the measurement of latency being used in the estimation of total time carried out in step (ii).

13. (Previously Presented) A method as claimed in claim 11, wherein the measurement of latency involves a server process sending a communication to an associated client to elicit a response therefrom, the measurement of latency being derived from the duration of the interval between the sending of the communication and the receipt of the response.

14. (Previously Presented) A method as claimed in claim 7, wherein knowledge of the quantity of first information which is to be presented and knowledge of the bandwidth of the communication channel over which the first information will be delivered to the visual display or the store local to the visual display are used to calculate the time required to transmit the first information to the visual display or the local store which is subsequently used in the estimation carried out in step i).

15. (Previously Presented) A method as claimed in claim 7, wherein knowledge of the quantity of second information which is to be presented and knowledge of the bandwidth of the communication channel over which the second information will be delivered to the visual display or audio interface or local store are used to calculate the time required to transmit the second information to the visual display or audio interface or local store which is subsequently used in the estimation carried out in step ii).

16. (Previously Presented) A method as claimed in claim 7, wherein the estimate of total time produced in step i) includes a component for the time taken to render the first information on the visual display.

17. (Currently Amended) A method as claimed in claim 7, wherein the estimate of the total time needed to deliver the first information ~~content~~ is based, at least in part, upon at least one characteristic of a communications channel over which the

second information is delivered, or wherein the estimate of the total time needed to deliver the second information ~~content~~ is based, at least in part, upon at least one characteristic the communications channel over which the first information is delivered.

18. (Previously Presented) A method as claimed in claim 17, wherein latency of the communications channel is a characteristic upon which the estimate is based.

19. (Previously Presented) A method as claimed in claim 16, wherein bandwidth of the communications channel is a characteristic upon which the estimate is based.

20. (Previously Presented) A system of apparatus for the delivery (a) of first information which is to be presented to the user via a visual display of a multi-modal interface and (b) of second information which is to be presented to the user over a visual or an audio interface of the multi-modal interface, the system including processing means configured to:

estimate total time needed to deliver the first Information to the visual display or to a store local to the visual display;

estimate total time needed to deliver the second information to the visual or audio interface or to a store local to the visual or audio interface; and

to use the estimates thereby obtained to determine whether presentation to the user of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation; and

to cause any delay determined to be necessary to be applied to achieve the desired synchronism of presentation.

21. (Previously Presented) A system of apparatus for the delivery (a) of first information which is to be presented to the user via first output means of a multi-modal interface and (b) of second information which is to be presented to the user via second output means of the multi-modal interface, the system including processing means configured to:

estimate the total time needed to deliver the first information to the first output means or to a store local to the first output means;

estimate the total time needed to deliver the second information to second output means or to a store local to the second output means; and

to use the estimates thereby obtained to determine whether presentation of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation; and

to cause any delay determined to be necessary to be applied to achieve the desired synchronism of presentation..